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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,744	07/28/2003	Ching-Ian Chao	3313-1019P	3819
2292	7590	06/16/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PATEL, ASHOK	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

11A

Office Action Summary

Application No.

10/627,744

Applicant(s)

CHAO ET AL.

Examiner

Ashok Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-14 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chien et al (USPGPUB 2004/0075628).

Chien et al disclose applicant's claimed dual-screen organic electroluminescent (EL) display (Figures 4, 5) including: two emission organic EL display panels, each including: a transparent substrate (6); an organic EL element (1-3), formed on the transparent substrate, wherein the organic EL element includes organic EL material (1), transparent and metallic electrodes (2, 3), the transparent metallic electrodes being respectively formed on opposite sides of the organic electroluminescent materials, wherein the light emitted from the organic electroluminescent

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element travels through the transparent substrate, and the transparent substrate of each organic electroluminescent display panel is used as a display side.

Chien et al do not disclose the organic EL device including: (a) a plurality of organic materials or plurality of transparent electrodes or plurality of metallic electrodes; (b) an insulation layer formed over the organic EL element for covering the metallic electrode and (c) an adhesive layer for encapsulating layer, as claimed by applicant.

However, it is well known in the art to provide plural/mixed light emitting material within the organic EL device for producing desired color or white light emission. Also it would have been obvious to one of ordinary skill in the art to provide plurality of transparent and metallic electrode for operating a desired pixel of the EL display panel.

Although providing applicant's claimed insulation layer is known to those skilled in the art for covering the metallic electrode, its use would obviously depend upon structural layout of different associated element. In Chien et al's device its use is not warranted sine the metallic electrode is already covered by element 5.

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Next, although Chien et al does not disclose the adhesive material for encapsulating the two organic EL display panels as claimed by applicant, Chien et al discloses a cap (5) serves the same purpose. In light of this, applicant's claimed adhesive material would have been a matter of obvious alternative design choice to one of ordinary skill in the art for encapsulating the organic EL display panel.

Therefore, it would have been obvious to one of ordinary skill in the art to provide Chien et al's dual screen organic EL device including: plurality of organic EL material for producing desired color, and plurality of transparent and metallic electrode for operating a desired pixel of the EL display panel.

As to claim 2, although Chien et al do not disclose the organic EL material chosen from the electronic hole injecting layer, the electronic hole transport layer, the emitting layer, the electron transport layer, the electron injecting layer and the charge generating layer, their use is old and well known to those skilled in the art since they all in combination provide a reliable buffer layer and enhances the emission characteristics of the light emitting layer.

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Therefore, it would have been obvious to one of ordinary skill in the art to provide Chien et al's dual screen organic EL device including the organic EL material as claimed by applicant for providing a reliable buffer layer and enhancing the emission characteristics of the light emitting layer.

As to claim 3, Chien et al disclose the ITO for transparent electrode (paragraph 0013).

As to claim 4, although Chien et al do not disclose the substrate made of glass or plastic, the use of glass or plastic is old and well known to those skilled in art for supporting the structure of the EL device. Therefore it would have been obvious to one of ordinary skill in the art to provide Chien et al's dual screen organic EL device including glass or plastic substrate for supporting the structure of the EL device

As to claim 5, as mentioned in the rejection of claim 5, the use of adhesive material would have been a matter of obvious alternative design choice to one of ordinary skill in the art for encapsulating the organic EL display panel. One of ordinary skill in the art would be able to use any suitable material for encapsulating the organic EL display panel.

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As to claim 6, Chien et al do not disclose the organic EL display panels driven by two passive matrices, two active matrices or a combination mode of a passive matrix and an active matrix. However, operating the EL device by suitable driving mechanism is known to those skilled in the art for operating the desired electrode/pixel within the organic EL display panel and therefore would have been obvious to provide within Chien et al's device for the stated reason.

3. Claims 7-14 are allowed over prior art since prior art of the record does not disclose applicant's claimed dual-screen organic EL display panel including: a *specific* combination of a top-emission organic EL element and a bottom-emission organic electroluminescent element; a transparent substrate; an insulation layer, a transparent lid; and an adhesive material, as specifically recited in claim 7. The device as recited in applicant's claim 7 emits light from the bottom-emission organic EL element, the light travels through the transparent substrate, and the transparent substrate and the transparent lid are used as two independent display screens, while the light emitted from the top-emission organic EL element travels through the transparent lid.

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4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Parker, Lee et al, and Fryd et al each are cited for showing a general structure of an organic EL device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ashok Patel
Primary Examiner
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